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67801 7590 10/20/2010 MARTIN D. MOYNIHAN d/b/a PRTSI, INC. P.O. BOX 16446 A PLINICTON, WA 20215			EXAMINER	
			LIN, KENNY S	
ARLINGTON, VA 22215			ART UNIT	PAPER NUMBER
			2478	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/533,452	PELED ET AL.		
Office Action Summary	Examiner	Art Unit		
	Kenny S. Lin	2478		
The MAILING DATE of this communication appearing for Reply	opears on the cover sheet with the c	correspondence address		
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory perio - Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 1.136(a). In no event, however, may a reply be tird d will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
1) ☐ Responsive to communication(s) filed on 16 2a) ☐ This action is FINAL. 2b) ☐ Th 3) ☐ Since this application is in condition for allow closed in accordance with the practice under	is action is non-final. ance except for formal matters, pro			
Disposition of Claims				
4) Claim(s) 176-354 is/are pending in the application Papers 4a) Of the above claim(s) See Continuation See Continuation See Continuation See Continuation See Continuation Sheet is/are reject 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and Sep Continuation Papers 9) The specification is objected to by the Examination The drawing(s) filed on is/are: a) according to the application papers	Sheet is/are withdrawn from considented. Vor election requirement.			
Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	ection is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 6/1/10 6/2/10 6/28/10 9/16/10.	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:	ate		

Continuation of Disposition of Claims: Claims withdrawn from consideration are 199-227,230-251,260-262,272-277,283,287-297,299,302-333,336-343,353 and 354.

Continuation of Disposition of Claims: Claims rejected are 176-198,228,229,252-259,263-271,278-282,284-286,298,300,301,330,334,335 and 344-352.

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DETAILED ACTION

Claims 176-354 are presented for examination. Claims 176-198, 228-229, 252-259, 263-271, 278-282, 284-286, 298, 300-301, 330, 334-335, 344-352 were elected for examining.
 Claims 199-227, 230-251, 260-262, 272-277, 283, 287-297, 299, 302-333, 336-343 and 353-354 are withdrawn. Claims 1-175 and 355-357 are canceled.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 176-183, 185-188, 197-198, 228-229, 252-253, 255-259, 263, 269-271, 278-280, 282, 286, 298, 300-301, 330, 334-335, 344-350 and 352 are rejected under 35 U.S.C. 102(e) as being anticipated by Bisbee et al (Bisbee), US 7,162,635.
- 4. Bisbee was cited in the previous office action.
- 5. As per claim 176, Bisbee taught the invention as claimed including a computerized method for management of data, the data evolving over a period of time, the managing based on

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information identification, the information identification being carried out using an electronic processor, comprising:

a. Monitoring information usage to detect information objects therein, said
 information objects being subject to said evolving (col.4, lines 50-67, col.5, lines 1-5, 11-46, col.8, lines 48-67);

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- b. Finding elementary information units within at least one detected information object (col.8, lines 48-67), said elementary information units remaining constant under said evolving (col.8, lines 48-67);
- Deducing information about an identity of said information object from identification of said elementary information units found within said information object (col.8, lines 48-67); and
- d. Managing said information object based on said information deduced about said identity from said elementary information units, thereby to provide management of said information that is resilient to said evolving (col.8, lines 61-67: forming data structure from the extracted information).

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6. As per claim 177, Bisbee taught the invention as claimed in claim 176. Bisbee further taught that wherein said information objects comprises at least one simple information object, said simple information object comprising a set of elementary information unit (col.8, lines 48-67).

- 7. As per claim 178, Bisbee taught the invention as claimed in claim 176. Bisbee further taught that wherein said elementary information units comprise at least a number, a character, a digit (col.8, lines 48-67).
- 8. As per claim 179, Bisbee taught the invention as claimed in claim 176. Bisbee further taught to assign elementary information units identifiers to elementary information units after identification (col.7, lines 8-17, 28-32).
- 9. As per claim 180, Bisbee taught the invention as claimed in claim 179. Bisbee further taught that said elementary information unit identifiers are utilized in said deducing (col.7, lines 8-17, 28-32, col.8, lines 38-43, 48-67, col.17, lines 43-45).
- 10. As per claims 181-182, Bisbee taught the invention as claimed in claim 176. Bisbee further taught said information object identification is carried out on an instance of said information object (col.7, lines 8-17, 28-32, col.8, lines 38-43, 48-67, col.17, lines 43-45), said information object instance being said information object in a specific format such as XML (col.4, lines 10-19).
- 11. As per claim 183, Bisbee taught the invention as claimed in claim 179. Bisbee further taught wherein said elementary information unit identifiers are determined by the content of said elementary information units which they are assigned to (col.7, lines 8-17, 28-32, col.8, lines 38-43, 48-67, col.17, lines 43-45).

- 12. As per claim 185, Bisbee taught the invention as claimed in claim 179. Bisbee further taught wherein said elementary information unit identifiers are at least partly determined by locations within an information object of respective elementary information units to which they are assigned (col.7, lines 8-17, 28-32, col.8, lines 38-43, 48-67, col.17, lines 43-45).
- 13. As per claim 186, Bisbee taught the invention as claimed in claim 179. Bisbee further taught wherein said elementary information unit identifiers are at least partly determined by the content of an elementary information unit in proximity to said elementary information units to which they are assigned to (col.7, lines 8-17, 28-32, col.8, lines 38-43, 48-67, col.17, lines 12-14, 43-45).
- 14. As per claims 187 and 298, Bisbee taught the invention as claimed in claims 176 and 179. Bisbee further taught to store said elementary information unit identifiers in a database and storing information about said information object in database (col.16, lines 32-35, col.17, lines 12-14, 33-45, col.18, lines 5-32).
- 15. As per claim 188, Bisbee taught the invention as claimed in claim 187. Bisbee further taught to comprise using said elementary information units identifiers stored in said database for identifying at least one further, unidentified, information object (col.7, lines 8-17, 28-32, col.8, lines 38-43, 48-67, col.17, lines 12-14, 33-45, col.18, lines 5-32).

- 16. As per claim 197, Bisbee taught the invention as claimed in claim 177. Bisbee further taught that said information objects comprises at least one compound information object, said compound information object comprising at least one of a simple information object, a compound information object (col.3, lines 44-47, col.4, lines 10-30).
- 17. As per claim 198, Bisbee taught the invention as claimed in claim 176. Bisbee further taught that said information comprises at least one of textual data, hyper text data; database data; image data; drawing data; picture data; word processor data (col.1, lines 25-32, col.4, lines 10-30, col.13, lines 31-55).
- 18. As per claim 228, Bisbee taught the invention as claimed in claim 176. Bisbee further taught that at least one user is defined in an owner definition as an owner of said information object (col.3, lines 26-29, col.5, lines 11-25).
- 19. As per claim 229, Bisbee taught the invention as claimed in claim 228. Bisbee further taught that said owner definition is stored in a database (col.3, lines 26-29, col.5, lines 11-29).
- 20. As per claim 252, Bisbee taught the invention as claimed in claim 179. Bisbee further taught to comprise applying preprocessing to said elementary information units before assigning identifiers thereto (col.6, lines 17-32, 66-67, col.7, lines 1-20).

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21. As per claim 253, Bisbee taught the invention as claimed in claim 252. Bisbee further taught that wherein said preprocessing is done in order to enhance at least one of efficiency and robustness (col.6, lines 17-32, 66-67, col.7, lines 1-20).

- 22. As per claims 255-259, Bisbee taught the invention as claimed in claim 252. Bisbee further taught to carry out said preprocessing so as to ensure that any area of a given size in said information object contains at least a predetermined number of said elementary information units having an assigned elementary information unit identifier wherein said given size id dependent on properties of said information object, wherein said properties of said information object comprises size and format, wherein said predetermined number id dependent on properties of said information object and wherein said properties of information object comprise size and format (col.7, lines 8-17, 28-32, col.8, lines 38-43, 48-67, col.17, lines 43-45).
- 23. As per claim 263, Bisbee taught the invention as claimed in claim 252. Bisbee further taught to comprise formulating respective assigned elementary information unit identifier to be resilient to small errors (col.20, lines 45-67, col.21, lines 1-16).
- 24. As per claim 269, Bisbee taught the invention as claimed in claim 176. Bisbee further taught said information object is a knowledge object (col.7, lines 8-17, 28-32, col.8, lines 38-43, 48-67, col.17, lines 43-45).

- 25. As per claims 270-271, Bisbee taught the invention as claimed in claim 176. Bisbee further taught said elementary information units is an elementary fact comprising sentence, database entry, representation independent description of knowledge, modular description of knowledge, and abstract description of knowledge (col.7, lines 8-17, 28-32, col.8, lines 38-43, 48-67, col.17, lines 43-45).
- 26. As per claims 278-280, Bisbee taught the invention as claimed in claim 179. Bisbee further taught said assigning of said elementary information unit identifier is carried out a plurality of times, each time utilizing a different method for assigning of an elementary information unit identifier and the storing the identifiers separately and can be distinguished according to said method utilized to assign them (col.7, lines 8-17, 28-32, col.8, lines 38-43, 48-67, col.17, lines 43-45).
- As per claims 282 and 286, Bisbee taught the invention as claimed in claim 179. Bisbee further taught said assigning of a respective elementary information unit identifier comprises utilizing a method being insertion resilient (col.7, lines 8-17, 28-32, col.8, lines 38-43, 48-67, col.17, lines 43-45).
- 28. As per claims 300-301, Bisbee taught the invention as claimed in claim 176. Bisbee further taught to store the order of said elementary information units within said information object in a database and using said order for identification of said information object (col.7, lines 8-17, 28-32, col.8, lines 38-43, 48-67, col.17, lines 43-45).

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29. As per claims 344-350, 352, they contain the same scope respectively with claims 176-181, 183 and 185, therefore they are rejected under the same rationales as applied to claims 176-181, 183 and 185 above.

Claim Rejections - 35 USC § 103

- 30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 31. Claims 184, 189-196, 284 and 351 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bisbee et al (Bisbee), US 7,162,635.
- 32. As per claim 184, Bisbee taught the invention as claimed in claim 179. Bisbee further taught wherein said elementary information unit identifiers are determined by said content (col.7, lines 8-17, 28-32, col.8, lines 38-43, 48-67, col.17, lines 43-45). Bisbee did not specifically teach that the identifiers are solely determined by content. However, it would have been obvious to implement the identifiers to be more specific in various ways. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bisbee and implement the assignment of identifier to specifically identify content of the elementary information unit to gain the benefit of precise referencing.

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33. As per claim 189, Bisbee taught the invention as claimed in claim 187. Bisbee further disclose the concept of comparing data (col.34, lines 1-5). Bisbee did not specifically teach to comprise using said elementary information units identifiers stored in said database for comparing information objects. However, the concept and advantage of data comparing, matching and analyzing in database is well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the users of Bisbee's method to use identifiers to retrieve data contents from the database for analyzing and matching similar contents.

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34. As per claims 190-196, Bisbee taught the invention as claimed in claim 190. Bisbee did not specifically teach in detail to store of only some of said elementary information unit identifiers in order to achieve reduce storage cost; increase efficiency of assigning of said elementary information units identifiers and increase the efficiency of searching for said elementary information units identifiers in said database. However, the concept and advantage of selectively storing and prioritized storing to reduce cost, simply management, reserve storage space is well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Bisbee and implements selective storing of the identifier to effectively store only the important and required identifiers to reduce storage cost and reduce storage space needed and simply database management.

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- 35. As per claim 284, Bisbee taught the invention as claimed in claim 278. Bisbee did not teach that said utilizing said different methods sequentially until a predetermined stop condition is reached. However, it would have been obvious to go through a list of instructions one by one until the last instruction is processed. The concept is similar to queue a plurality of requests/commands for processing in a processing queue and process the commands one by one. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bisbee and further implement the method to automatically process a serious of instructions until the end of the instruction is reached.
- 36. As per claim 351, it contain the same scope respectively with claim 184, therefore they are rejected under the same rationales as applied to claim 184 above.
- 37. Claim 254 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bisbee et al (Bisbee), US 7,162,635, in view of Flynn et al (Flynn), US 5,347,653.
- 38. Flynn was cited in the previous office action.
- 39. As per claim 254, Bisbee taught the invention as claimed in claim 252. Bisbee did not specifically teach that said preprocessing comprises at least one of canonization; removal of common words; removal of words not having a substantial effect on the meaning of the text; removal of punctuation; correction of spelling; canonization of spelling; scene detection; canonizing size; canonizing orientation; canonizing color; removing color; reducing noise;

enhancing area separation; enhancing borders; enhancing lines; sharpening; burring; removal of elementary information units substantially similar to neighboring elementary information units; canonization of grammar; and transformation to a phonetic representation. However, processes such as correcting spelling and removing text, color are well known in the art. Flynn taught to correct spellings or remove text for information objects (col.5, lines 4-9, col.9, lines 36-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bisbee and Flynn because Flynn's teaching enables Bisbee's method to make modifications to the information object.

- 40. Claim 264-268 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bisbee et al (Bisbee), US 7,162,635, in view of Mannila et al (Mannila), US 6,920,453.
- 41. Mannila was cited in the previous office action.
- 42. As per claims 264-268, said assigning of elementary information unit identifier utilizes image matching or comprises a mapping to a Euclidian space. Mannila taught to map data to a Euclidian space by approximating the similarity between the data by comparing, looking for patterns and regularities in data (col.2, lines 25-47, col.5, lines 1-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Bisbee and Mannila because Mannila's teaching of determining the similarities between data and mapping to Euclidian space provides Bisbee's method with an efficient, fast and simply process of analyzing large amounts of data (see Mannila, col.2, lines 8-18, 25-35).

Bisbee and Mannila did not specifically teach that the similarity/difference is one of semantic difference, distance measured by image matching, phonetic difference, and spelling difference. However, since Mannila suggested comparing data patterns and regularities, it would have been obvious to apply such teaching to determine differences in various areas of the content in order to obtain more specific analysis results.

- 43. Claim 285 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bisbee et al (Bisbee), US 7,162,635, in view of Ryan et al (Ryan), US 2002/0010743.
- 44. Ryan was cited in the previous office action.
- 45. As per claim 285, Bisbee taught the invention as claimed in claim 179. Bisbee did not specifically teach that said information object comprises spreadsheet data, and wherein said assigning of said elementary information unit identifier assigned to said information object comprises utilizing a method comprising at least one of the following characteristics: invariance to linear transformation; invariance to reordering; invariance to permutation; resilience to linear transformation; resilience to reordering; resilience to permutation; resilience to minor changes; resilience to cuts; utilizing of statistic moment; utilizing of statistic moment for a table; utilizing statistic moment for a row; utilizing statistic moment for a column; and utilizing a mathematical descriptor of the information object data. Ryan taught information object to include spreadsheets and assign identifier to the spreadsheets for resilience to reordering, cuts and minor changes and utilizing a mathematical descriptor of the information object data (abstract, pp. 0014, 0054-0055,

0116, 0142). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bisbee and Ryan because Ryan's teaching of spreadsheet information management methods enables Bisbee's method to better manage and storing the information unit identifiers (see Ryan, abstract).

- 46. Claims 281, 330, 334-335 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bisbee et al (Bisbee), US 7,162,635, in view of Crill et al (Crill), US 6,445,822.
- 47. Crill was cited in the previous office action.
- 48. As per claim 281, Bisbee taught the invention as claimed in claim 278. Bisbee did not specifically teach that the different methods are selected such as to optimize between at least any two of the following: storage space; search speed; capability to detect transformation; capability to detect a specific transformation; resilience to transformation; resolution of identification from among similar information objects; resolution of identification of boundaries within compound information objects; resilience to a specific transformation; and resilience to transformation.

 Crill taught to assign identifiers to optimize resolution of identification from among similar information objects and detect transformation (abstract, col.2, lines 37-51, col.7, lines 3-13, 22-30, col.10, lines 55-67, col.11, lines 1-4, col.12, lines 54-67, col.13, lines 1-4, col.14, lines 19-43, col.22, lines 48-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bisbee and Crill because Crill's method of comparing similarity of various formatted digital contents allows Bisbee's method to locate and

identify files of similar contents, file format type by using optical correlation (see Crill, col.2, lines 21-34).

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- 49. As per claims 330, Bisbee taught the invention as claimed in claim 179. Bisbee did not teach in detail to use said deducing to locate at least one information with similar content to a given information object. Crill taught to compare and locate similar contents (abstract, col.2, lines 37-51, col.7, lines 3-13, 22-30, col.10, lines 55-67, col.11, lines 1-4, col.12, lines 54-67, col.13, lines 1-4, col.14, lines 33-43, col.22, lines 48-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bisbee and Crill because Crill's method of using optical correlation to compare similarity of various formatted digital contents allows Bisbee's method to search and locate and identify files of similar contents, including files distributed at different databases (see Crill, col.2, lines 21-34).
- 50. As per claim 334, Bisbee and Crill taught the invention as claimed in claim 330. Crill further taught that the locating is done in an information storage medium (abstract, col.2, lines 21-34, 37-51, col.7, lines 3-13, 22-30, col.10, lines 55-67, col.11, lines 1-4, col.12, lines 54-67, col.13, lines 1-4, col.14, lines 33-43, col.22, lines 48-52).
- As per claim 335, Bisbee and Crill taught the invention as claimed in claim 334. Crill further taught said information storage medium comprises at least one file system (abstract, col.2, lines 21-34, 37-51, col.7, lines 3-13, 22-30, col.10, lines 55-67, col.11, lines 1-4, col.12, lines 54-67, col.13, lines 1-4, col.14, lines 33-43, col.22, lines 48-52).

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Response to Arguments

52. Applicant's arguments filed 8/9/2010 have been fully considered but they are not persuasive.

53. In the remark, applicant argued: (1) Bisbee does not permit the information object to evolve. The elementary information unit of Bisbee is an electronic signature which fails the identification process if anything has changed in the information object.

54. The examiner traverse the argument:

As to point (1), Bisbee permits the information object to evolve. Bisbee taught that the e-original objects can be modified to extent the validation period (col.4, lines 50-67, col.5, lines 1-5). Bisbee taught the elementary information to include signature block that comprises signature block certificate information that includes signer information, date-time of digitized signature and date-time of the TCU's receipt of the signature block and certificate information that includes signer identifying information and using these extracted information to form data structure and a forgery-resistant indicia to identify the e-original object (col.8, lines 48-67). The examiner further provided mapping to the newly amended limitation in the above rejection.

The request to restore the withdrawn species is hereby withhold since the claims are not in condition for allowance.

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Conclusion

55. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

56. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kenny S Lin/ Primary Examiner, Art Unit 2452 October 19, 2010